

WEST Search History

DATE: Saturday, December 10, 2005

<u>Hide?</u>	<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ</i>			
<input type="checkbox"/>	L4	pctx1	3
<input type="checkbox"/>	L3	fmrfamide-related	36
<input type="checkbox"/>	L2	fmrfamide	83
<input type="checkbox"/>	L1	ASIC\$ with (agonist or antagonist)	10

END OF SEARCH HISTORY

(FILE 'HOME' ENTERED AT 13:55:38 ON 10 DEC 2005)

FILE 'MEDLINE, BIOSIS' ENTERED AT 14:08:46 ON 10 DEC 2005

L1 573 S ASIC?

L2 33 S L1 AND (ANTAGONIST OR AGONIST)

L3 24 DUP REM L2 (9 DUPLICATES REMOVED)

L4 16 S PCTX1

L5 11 DUP REM L4 (5 DUPLICATES REMOVED)

L5 ANSWER 11 OF 11 MEDLINE on STN
ACCESSION NUMBER: 2000437154 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10829030
TITLE: Isolation of a tarantula toxin specific for a class of proton-gated Na^+ channels.
AUTHOR: Escoubas P; De Weille J R; Lecoq A; Diochot S; Waldmann R; Champigny G; Moinier D; Menez A; Lazdunski M
CORPORATE SOURCE: Institut de Pharmacologie Moleculaire et Cellulaire, Centre National de la Recherche Scientifique, Sophia-Antipolis, Valbonne, France.
SOURCE: Journal of biological chemistry, (2000 Aug 18) 275 (33) 25116-21.
Journal code: 2985121R. ISSN: 0021-9258.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200009
ENTRY DATE: Entered STN: 20000928
Last Updated on STN: 20020719
Entered Medline: 20000921
AB Acid sensing is associated with nociception, taste transduction, and perception of extracellular pH fluctuations in the brain. Acid sensing is carried out by the simplest class of ligand-gated channels, the family of $\text{H}(+)$ -gated $\text{Na}(+)$ channels. These channels have recently been cloned and belong to the acid-sensitive ion channel (ASIC) family. Toxins from animal venoms have been essential for studies of voltage-sensitive and ligand-gated ion channels. This paper describes a novel 40-amino acid toxin from tarantula venom, which potently blocks ($\text{IC}_{50} = 0.9 \text{ nm}$) a particular subclass of ASIC channels that are highly expressed in both central nervous system neurons and sensory neurons from dorsal root ganglia. This channel type has properties identical to those described for the homomultimeric assembly of ASIC1a. Homomultimeric assemblies of other members of the ASIC family and heteromultimeric assemblies of ASIC1a with other ASIC subunits are insensitive to the toxin. The new toxin is the first high affinity and highly selective pharmacological agent for this novel class of ionic channels. It will be important for future studies of their physiological and physio-pathological roles.